

## CLAIMS

1. A method for performing color correction on an image, comprising, for each pixel to be corrected:

storing an input luminance value corresponding to a luminance of the pixel before color

5 correction;

performing a color correction operation on the pixel to provide color corrected components for the pixel;

determining an output luminance and output saturation corresponding to the color corrected components for the pixel;

10 determining a scaling factor according to a ratio of the input luminance to the output luminance;

scaling the output saturation by the scaling factor to provide a corrected saturation; and

using the input luminance and the corrected saturation to provide values for the corrected pixel.

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2. The method of claim 1, wherein the color correction operation on the pixel is a color matching operation whereby the pixel is modified to match at least a hue of a target color.

3. The method of claim 1, wherein the corrected pixel is represented by a luminance component and chroma difference components, and wherein scaling comprises scaling the chroma difference components of the corrected pixel.

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4. A computer program product, comprising:

a computer readable medium;

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computer program instructions stored on the computer readable medium that, when processed by a computer, instruct the computer to perform a method for performing color correction on an image, comprising, for each pixel to be corrected:

storing an input luminance value corresponding to a luminance of the pixel before color correction;

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performing a color correction operation on the pixel to provide color corrected components for the pixel;

determining an output luminance and output saturation corresponding to the color corrected components for the pixel;

determining a scaling factor according to a ratio of the input luminance to the output luminance;

- 5            scaling the output saturation by the scaling factor to provide a corrected saturation; and  
             using the input luminance and the corrected saturation to provide values for the corrected pixel.

5. The method of claim 4, wherein the color correction operation on the pixel is a color matching  
10           operation whereby the pixel is modified to match at least a hue of a target color.

6. The method of claim 4, wherein the corrected pixel is represented by a luminance component and chroma difference components, and wherein scaling comprises scaling the chroma difference components of the corrected pixel.